

**UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA**

DEMOCRACY NORTH CAROLINA, THE
LEAGUE OF WOMEN VOTERS OF NORTH
CAROLINA, DONNA PERMAR, JOHN P.
CLARK, MARGARET B. CATES, LELIA
BENTLEY, REGINA WHITNEY EDWARDS,
ROBERT K. PRIDY II, WALTER
HUTCHINS, AND SUSAN SCHAFFER,

Plaintiffs,

v.

THE NORTH CAROLINA STATE BOARD OF
ELECTIONS; DAMON CIRCOSTA, in his
official capacity as CHAIR OF THE
STATE BOARD OF ELECTIONS; STELLA
ANDERSON, in her official capacity
as SECRETARY OF THE STATE BOARD OF
ELECTIONS; KEN RAYMOND, in his
official capacity as MEMBER OF THE
STATE BOARD OF ELECTIONS; JEFF
CARMON III, in his official
capacity as MEMBER OF THE STATE
BOARD OF ELECTIONS; DAVID C. BLACK,
in his official capacity as MEMBER
OF THE STATE BOARD OF ELECTIONS;
KAREN BRINSON BELL, in her official
capacity as EXECUTIVE DIRECTOR OF
THE STATE BOARD OF ELECTIONS; THE
NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION; J. ERIC BOYETTE, in
his official capacity as
TRANSPORTATION SECRETARY; THE NORTH
CAROLINA DEPARTMENT OF HEALTH AND
HUMAN SERVICES; MANDY COHEN, in her
official capacity as SECRETARY OF
HEALTH AND HUMAN SERVICES,

Defendants,

Civil Action No. 20-cv-457

PHILIP E. BERGER, in his official
capacity as PRESIDENT PRO TEMPORE
OF THE NORTH CAROLINA SENATE;
TIMOTHY K. MOORE, in his official
capacity as SPEAKER OF THE NORTH
CAROLINA HOUSE OF REPRESENTATIVES,

Defendant-Intervenors.

REPLY DECLARATION OF CHRISTOPHER KETCHIE

I, Christopher Ketchie, hereby declare:

1. All facts set forth herein are based on my personal knowledge, and if called upon to testify as to the contents of this Declaration, I could and would do so.

2. I am a demographer and data analyst for Southern Coalition for Social Justice, where I specialize in research, analysis, and spatial visualization of demographic and electoral data.

3. This is the second declaration I am submitting in this matter.

4. In this matter, I have used public data sets to isolate certain statistics for reference in the Complaint and the Brief in Support of Plaintiffs' Motion for Preliminary Injunction.

5. To determine the number of registrations received in the last month before the close of books for the 2016

and 2018 North Carolina general elections, I used the *November 8, 2016 and November 6, 2018 Voter Registration Snapshots*, published by the North Carolina State Board of Elections and available at https://s3.amazonaws.com/dl.ncsbe.gov/data/Snapshots/VR_Snapshot_20161108.zip and https://s3.amazonaws.com/dl.ncsbe.gov/data/Snapshots/VR_Snapshot_20181106.zip. The data files are accessible by going to <https://www.ncsbe.gov/Public-Records-Data-Info/Election-Results-Data>, and navigating to "FTP Site" → "data" → "Snapshots" → "VR_Snapshot_20161108.zip" and "VR_Snapshot_20181106.zip". For 2016, I selected all record with "registr_dt" values ranging from 9/14/2016 to 10/14/2016 that did not have "DENIED" or "REMOVED" in the "voter_status_desc" field. The results for 2016 can be found in Exhibit 1. Similarly, for 2018, I selected all records with "registr_dt" values ranging from 9/12/2018 to 10/12/2018 that did not have "DENIED" or "REMOVED" in the "voter_status_desc" field. The results for 2018 can be found in Exhibit 2.

6. To determine the number of Same Day Registrations (SDR) during the early voting periods of the 2016 and 2018

North Carolina general elections, I used the *November 8, 2016 and November 6, 2018 Absentee Files*, published by the North Carolina State Board of Elections and available at https://s3.amazonaws.com/dl.ncsbe.gov/ENRS/2016_11_08/absentee_20161108_w_ethnicity.zip and https://s3.amazonaws.com/dl.ncsbe.gov/ENRS/2018_11_06/absentee_20181106_w_ethnicity.zip. The data files are accessible by going to <https://www.ncsbe.gov/Public-Records-Data-Info/Election-Results-Data>, and navigating to "FTP Site" → "ENRS" → "2016_11_08" → "absentee_20161108_w_ethnicity.zip" and "2018_11_06" → "absentee_20181106_w_ethnicity.zip". For both 2016 and 2018, I selected all records with "sdr" values of "Y", "ballot_req_type" values of "ONE-STOP", and removed records with duplicate "ncid" values. The results of this analysis show that 100,262 individuals took advantage of SDR during the early voting period in 2016, and 45,532 individuals took advantage of SDR during the early voting period in 2018.

7. To determine the percentage breakdown of the reasons for absentee mail-in ballots rejected for the March 2020 North Carolina primary, I used data from the *March 3,*

2020 Absentee File, published by the North Carolina State Board of Elections and available at https://s3.amazonaws.com/dl.ncsbe.gov/ENRS/2020_03_03/absentee_20200303.zip. This data file is accessible by going to <https://www.ncsbe.gov/Public-Records-Data-Info/Election-Results-Data> and navigating to "FTP Site" → "ENRS" → "2020_03_03" → "absentee_20200303.zip". I aggregated absentee mail-in ballots by the "ballot_rtn_status" field and divided the total number for each specific ballot rejection reason by the total number of all rejected ballots. These data show at least 41% (1,843) of all rejected mail-in ballots were rejected due to non-compliance with form requirements (not properly notarized, signature different, voter signature missing, and witness info incomplete). However, depending on the interpretation of what a "spoiled" mail-in ballot is, the percentage could be as high as 78% if spoiled ballots (1,705) are included. The full results can be found in Exhibit 3.

8. To determine the number of registered voters ineligible to use the Online Voter Registration (OVR) system, I used the most recent *DMV ID "No Match" List*, published September 25, 2019, by the North Carolina State

Board of Elections and available at https://s3.amazonaws.com/dl.ncsbe.gov/Requests/ID_no_match_public_09252019.xlsx. The data file is accessible by going to <https://www.ncsbe.gov/Public-Records-Data-Info/Election-Results-Data>, and navigating to "FTP Site" → "Requests" → "ID_no_match_public_09252019.xlsx". Of the 617,029 registered voters included in this list, 348,838 did not match with any record of having a DMV issued ID. The remaining 268,191 registered voters matched with a record of having a DMV issued ID, however these IDs were expired. Given the limited amount of data contained in this "no match" file, I do not know how many of these registered voters with expired IDs are more than 2 years expired, requiring them to renew in-person at a DMV office. Additionally, I am unaware if not being able to renew online precludes them from using OVR. Therefore, at least 348,838 registered voters are ineligible to use OVR, but this number could be as high as 617,029.

9. To determine the number and percentage of single-person households for each county in North Carolina, I used the *S2501 Occupancy Characteristics Table* from the *2018 ACS 5-year Estimates Dataset*, published by the United States

Census Bureau and available at

[https://data.census.gov/cedsci/table?g=0400000US37.050000&tid=ACST5Y2018.S2501&text=S2501&vintage=2018&hidePreview=false&layer=VT 2018 050 00 PY D1&cid=S2501 C01 001E](https://data.census.gov/cedsci/table?g=0400000US37.050000&tid=ACST5Y2018.S2501&text=S2501&vintage=2018&hidePreview=false&layer=VT%2018%2000%20PY%20D1&cid=S2501%20C01%20001E), and the results can be found in Exhibit 4.

10. To determine the age distribution of single-person households for each county in North Carolina, I used the same dataset from paragraph 9, and the results can be found in Exhibit 5.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Executed this 1st day of July, 2020



/s/

Christopher Ketchie

Exhibit 1

Date	Registrations
September 14, 2016	5,254
September 15, 2016	4,697
September 16, 2016	4,667
September 17, 2016	960
September 18, 2016	403
September 19, 2016	6,377
September 20, 2016	3,999
September 21, 2016	3,837
September 22, 2016	4,910
September 23, 2016	5,236
September 24, 2016	963
September 25, 2016	660
September 26, 2016	5,758
September 27, 2016	7,213
September 28, 2016	5,419
September 29, 2016	5,622
September 30, 2016	6,156
October 1, 2016	1,997
October 2, 2016	548
October 3, 2016	7,668
October 4, 2016	7,714
October 5, 2016	9,229
October 6, 2016	6,793
October 7, 2016	7,608
October 8, 2016	1,892
October 9, 2016	819
October 10, 2016	9,252
October 11, 2016	11,371
October 12, 2016	10,386
October 13, 2016	13,921
October 14, 2016	45,672
Grand Total	207,001

Exhibit 2

Date	Registrations
September 12, 2018	2,164
September 13, 2018	1,742
September 14, 2018	866
September 15, 2018	150
September 16, 2018	132
September 17, 2018	1,818
September 18, 2018	2,389
September 19, 2018	2,070
September 20, 2018	1,971
September 21, 2018	2,362
September 22, 2018	351
September 23, 2018	119
September 24, 2018	3,343
September 25, 2018	3,179
September 26, 2018	3,772
September 27, 2018	3,098
September 28, 2018	3,504
September 29, 2018	581
September 30, 2018	304
October 1, 2018	4,819
October 2, 2018	3,416
October 3, 2018	3,757
October 4, 2018	4,614
October 5, 2018	4,019
October 6, 2018	746
October 7, 2018	230
October 8, 2018	4,489
October 9, 2018	5,785
October 10, 2018	5,682
October 11, 2018	6,196
October 12, 2018	21,500
Grand Total	99,168

Exhibit 3

March 3, 2020 Primary Absentee Mail-In Rejected Ballots		
Ballot Return Status (Rejected)	# of Rejected Ballots	% of Rejected Ballots
DUPLICATE	6	0.13%
E-TRANSMISSION FAILURE	1	0.02%
NOT PROPERLY NOTARIZED	13	0.29%
PENDING	13	0.29%
RETURNED AFTER DEADLINE	800	17.64%
RETURNED UNDELIVERABLE	166	3.66%
SIGNATURE DIFFERENT	25	0.55%
SPOILED	1,705	37.60%
VOTER SIGNATURE MISSING	1,543	34.03%
WITNESS INFO INCOMPLETE	262	5.78%
TOTAL	4,534	100.00%

Exhibit 4

County	Occupied Housing Units	Householder Living Alone	Householder Living Alone %
Warren	7,780	2,905	37.34%
Bertie	7,976	2,953	37.02%
Washington	5,073	1,869	36.84%
Buncombe	107,093	36,526	34.11%
Polk	9,047	3,038	33.58%
Durham	123,444	40,853	33.09%
New Hanover	93,636	30,975	33.08%
Hertford	8,899	2,919	32.80%
Cumberland	124,418	40,405	32.48%
Anson	9,516	3,089	32.46%
Forsyth	146,685	47,136	32.13%
Swain	5,443	1,749	32.13%
Bladen	13,968	4,461	31.94%
Rutherford	26,345	8,362	31.74%
Pamlico	5,352	1,689	31.56%
Beaufort	19,325	6,064	31.38%
Mitchell	6,361	1,992	31.32%
Columbus	22,306	6,980	31.29%
Macon	15,699	4,901	31.22%
Moore	38,965	12,138	31.15%
Haywood	26,336	8,176	31.04%
Halifax	21,116	6,539	30.97%
Tyrrell	1,631	505	30.96%
Wilson	32,128	9,886	30.77%
Jackson	16,642	5,112	30.72%
Richmond	18,546	5,683	30.64%
Mecklenburg	403,546	123,141	30.51%
Henderson	48,281	14,725	30.50%
Pender	21,766	6,625	30.44%
Guilford	202,731	61,548	30.36%
Lenoir	23,121	7,004	30.29%
Chowan	5,984	1,809	30.23%
Carteret	29,690	8,958	30.17%
Rockingham	37,201	11,220	30.16%
Jones	4,137	1,237	29.90%
Sampson	23,537	7,013	29.80%
Alamance	64,059	19,046	29.73%
Graham	3,288	977	29.71%
Nash	36,720	10,872	29.61%
Pitt	69,169	20,427	29.53%
Wilkes	28,355	8,340	29.41%
Clay	5,062	1,478	29.20%
Vance	16,854	4,911	29.14%
Scotland	13,113	3,818	29.12%
Cherokee	11,895	3,439	28.91%
Northampton	8,628	2,490	28.86%
Robeson	45,969	13,155	28.62%

Exhibit 4

County	Occupied Housing Units	Householder Living Alone	Householder Living Alone %
Surry	28,985	8,287	28.59%
Burke	34,672	9,901	28.56%
Cleveland	36,882	10,517	28.52%
Craven	40,871	11,622	28.44%
North Carolina	3,918,597	1,113,548	28.42%
Watauga	20,355	5,782	28.41%
Orange	52,529	14,921	28.41%
Pasquotank	14,780	4,172	28.23%
Edgecombe	21,371	6,021	28.17%
Alleghany	4,746	1,335	28.13%
Dare	15,441	4,311	27.92%
Yancey	7,402	2,065	27.90%
Montgomery	10,411	2,902	27.87%
Wayne	48,153	13,399	27.83%
Stokes	19,302	5,357	27.75%
Duplin	21,781	6,013	27.61%
Avery	6,587	1,816	27.57%
Martin	9,471	2,611	27.57%
Yadkin	15,448	4,253	27.53%
Gaston	81,494	22,393	27.48%
Caldwell	32,594	8,838	27.12%
Person	15,744	4,269	27.12%
Caswell	9,110	2,462	27.03%
Madison	8,452	2,283	27.01%
Gates	4,477	1,208	26.98%
Rowan	52,301	14,078	26.92%
Ashe	11,805	3,176	26.90%
Lee	21,744	5,844	26.88%
Perquimans	5,919	1,590	26.86%
Randolph	56,041	15,042	26.84%
Chatham	28,527	7,654	26.83%
Brunswick	54,226	14,470	26.68%
Greene	7,259	1,921	26.46%
Alexander	13,722	3,589	26.16%
Catawba	61,099	15,790	25.84%
Wake	390,498	100,691	25.79%
Stanly	23,717	6,046	25.49%
Transylvania	14,123	3,596	25.46%
Davidson	65,471	16,322	24.93%
Granville	21,030	5,157	24.52%
Harnett	45,086	11,021	24.44%
Hoke	17,722	4,324	24.40%
McDowell	17,961	4,342	24.17%
Franklin	24,749	5,916	23.90%
Davie	15,999	3,816	23.85%
Iredell	65,246	15,223	23.33%
Onslow	64,065	14,755	23.03%

Exhibit 4

County	Occupied Housing Units	Householder Living Alone	Householder Living Alone %
Cabarrus	72,299	16,364	22.63%
Johnston	67,154	14,769	21.99%
Lincoln	32,022	6,762	21.12%
Currituck	10,148	2,000	19.71%
Hyde	1,769	316	17.86%
Union	75,165	12,464	16.58%
Camden	3,836	634	16.53%

Exhibit 5

County	Householder Living Alone	Householder Living Alone (15 to 34)	Householder Living Alone (35 to 64)	Householder Living Alone (65 and over)	Householder Living Alone (15 to 34) %	Householder Living Alone (35 to 64) %	Householder Living Alone (65 and over) %
Hyde	316	0	130	186	0.00%	41.14%	58.86%
Mitchell	1,992	215	645	1,132	10.79%	32.38%	56.83%
Davie	3,816	218	1,442	2,156	5.71%	37.79%	56.50%
Macon	4,901	545	1,595	2,761	11.12%	32.54%	56.34%
Camden	634	37	243	354	5.84%	38.33%	55.84%
Chowan	1,809	184	626	999	10.17%	34.60%	55.22%
Chatham	7,654	618	2,893	4,143	8.07%	37.80%	54.13%
Madison	2,283	195	876	1,212	8.54%	38.37%	53.09%
Cherokee	3,439	189	1,434	1,816	5.50%	41.70%	52.81%
Transylvania	3,596	472	1,228	1,896	13.13%	34.15%	52.73%
Martin	2,611	84	1,167	1,360	3.22%	44.70%	52.09%
Duplin	6,013	447	2,436	3,130	7.43%	40.51%	52.05%
Tyrrell	505	20	224	261	3.96%	44.36%	51.68%
Lenoir	7,004	364	3,030	3,610	5.20%	43.26%	51.54%
Beaufort	6,064	490	2,466	3,108	8.08%	40.67%	51.25%
Jones	1,237	48	555	634	3.88%	44.87%	51.25%
Carteret	8,958	725	3,647	4,586	8.09%	40.71%	51.19%
Northampton	2,490	166	1,050	1,274	6.67%	42.17%	51.16%
Bertie	2,953	145	1,312	1,496	4.91%	44.43%	50.66%
Moore	12,138	1,202	4,804	6,132	9.90%	39.58%	50.52%
Rutherford	8,362	648	3,490	4,224	7.75%	41.74%	50.51%
Wilkes	8,340	678	3,473	4,189	8.13%	41.64%	50.23%
Polk	3,038	221	1,292	1,525	7.27%	42.53%	50.20%
Montgomery	2,902	196	1,252	1,454	6.75%	43.14%	50.10%
Pamlico	1,689	156	688	845	9.24%	40.73%	50.03%
Ashe	3,176	149	1,445	1,582	4.69%	45.50%	49.81%
Yadkin	4,253	386	1,786	2,081	9.08%	41.99%	48.93%
Edgecombe	6,021	335	2,754	2,932	5.56%	45.74%	48.70%
Caswell	2,462	210	1,056	1,196	8.53%	42.89%	48.58%
Columbus	6,980	766	2,835	3,379	10.97%	40.62%	48.41%
Haywood	8,176	843	3,385	3,948	10.31%	41.40%	48.29%
Yancey	2,065	208	860	997	10.07%	41.65%	48.28%
Surry	8,287	585	3,713	3,989	7.06%	44.81%	48.14%
Warren	2,905	252	1,258	1,395	8.67%	43.30%	48.02%
Henderson	14,725	1,234	6,427	7,064	8.38%	43.65%	47.97%
Scotland	3,818	258	1,736	1,824	6.76%	45.47%	47.77%
Alexander	3,589	354	1,532	1,703	9.86%	42.69%	47.45%
Halifax	6,539	453	2,991	3,095	6.93%	45.74%	47.33%
Sampson	7,013	449	3,248	3,316	6.40%	46.31%	47.28%
Hertford	2,919	242	1,297	1,380	8.29%	44.43%	47.28%
Rockingham	11,220	637	5,313	5,270	5.68%	47.35%	46.97%
Clay	1,478	164	621	693	11.10%	42.02%	46.89%
Alleghany	1,335	114	598	623	8.54%	44.79%	46.67%
Stokes	5,357	347	2,525	2,485	6.48%	47.13%	46.39%

Exhibit 5

County	Householder Living Alone	Householder Living Alone (15 to 34)	Householder Living Alone (35 to 64)	Householder Living Alone (65 and over)	Householder Living Alone (15 to 34) %	Householder Living Alone (35 to 64) %	Householder Living Alone (65 and over) %
Stanly	6,046	570	2,676	2,800	9.43%	44.26%	46.31%
McDowell	4,342	448	1,889	2,005	10.32%	43.51%	46.18%
Nash	10,872	984	4,895	4,993	9.05%	45.02%	45.93%
Burke	9,901	808	4,557	4,536	8.16%	46.03%	45.81%
Graham	977	76	455	446	7.78%	46.57%	45.65%
Davidson	16,322	1,411	7,488	7,423	8.64%	45.88%	45.48%
Richmond	5,683	597	2,544	2,542	10.51%	44.77%	44.73%
Washington	1,869	116	918	835	6.21%	49.12%	44.68%
Avery	1,816	247	765	804	13.60%	42.13%	44.27%
Jackson	5,112	903	1,947	2,262	17.66%	38.09%	44.25%
Brunswick	14,470	1,309	6,769	6,392	9.05%	46.78%	44.17%
Anson	3,089	443	1,285	1,361	14.34%	41.60%	44.06%
Lincoln	6,762	723	3,060	2,979	10.69%	45.25%	44.06%
Cleveland	10,517	979	4,939	4,599	9.31%	46.96%	43.73%
Gates	1,208	23	659	526	1.90%	54.55%	43.54%
Randolph	15,042	1,658	6,864	6,520	11.02%	45.63%	43.35%
Person	4,269	285	2,134	1,850	6.68%	49.99%	43.34%
Wilson	9,886	927	4,679	4,280	9.38%	47.33%	43.29%
Perquimans	1,590	66	836	688	4.15%	52.58%	43.27%
Greene	1,921	95	997	829	4.95%	51.90%	43.15%
Caldwell	8,838	665	4,367	3,806	7.52%	49.41%	43.06%
Bladen	4,461	446	2,104	1,911	10.00%	47.16%	42.84%
Catawba	15,790	1,971	7,063	6,756	12.48%	44.73%	42.79%
Alamance	19,046	2,392	8,582	8,072	12.56%	45.06%	42.38%
Vance	4,911	456	2,374	2,081	9.29%	48.34%	42.37%
Wayne	13,399	1,565	6,180	5,654	11.68%	46.12%	42.20%
Lee	5,844	539	2,842	2,463	9.22%	48.63%	42.15%
Union	12,464	950	6,360	5,154	7.62%	51.03%	41.35%
Rowan	14,078	1,580	6,680	5,818	11.22%	47.45%	41.33%
Craven	11,622	1,823	5,001	4,798	15.69%	43.03%	41.28%
Swain	1,749	227	803	719	12.98%	45.91%	41.11%
Granville	5,157	429	2,611	2,117	8.32%	50.63%	41.05%
Gaston	22,393	2,563	10,824	9,006	11.45%	48.34%	40.22%
Franklin	5,916	546	3,004	2,366	9.23%	50.78%	39.99%
Pasquotank	4,172	533	1,988	1,651	12.78%	47.65%	39.57%
Robeson	13,155	1,207	6,748	5,200	9.18%	51.30%	39.53%
Buncombe	36,526	6,124	16,199	14,203	16.77%	44.35%	38.88%
Currituck	2,000	136	1,094	770	6.80%	54.70%	38.50%
Johnston	14,769	1,276	7,821	5,672	8.64%	52.96%	38.40%
Dare	4,311	437	2,221	1,653	10.14%	51.52%	38.34%
Iredell	15,223	2,209	7,226	5,788	14.51%	47.47%	38.02%
Harnett	11,021	1,547	5,348	4,126	14.04%	48.53%	37.44%
North Carolina	1,113,548	177,977	519,450	416,121	15.98%	46.65%	37.37%
Cabarrus	16,364	1,721	8,585	6,058	10.52%	52.46%	37.02%

Exhibit 5

County	Householder Living Alone	Householder Living Alone (15 to 34)	Householder Living Alone (35 to 64)	Householder Living Alone (65 and over)	Householder Living Alone (15 to 34) %	Householder Living Alone (35 to 64) %	Householder Living Alone (65 and over) %
Forsyth	47,136	7,853	22,260	17,023	16.66%	47.23%	36.11%
Pender	6,625	746	3,509	2,370	11.26%	52.97%	35.77%
Guilford	61,548	11,861	28,578	21,109	19.27%	46.43%	34.30%
Watauga	5,782	1,628	2,172	1,982	28.16%	37.56%	34.28%
New Hanover	30,975	6,316	14,141	10,518	20.39%	45.65%	33.96%
Orange	14,921	3,693	6,466	4,762	24.75%	43.33%	31.91%
Onslow	14,755	4,262	6,186	4,307	28.89%	41.92%	29.19%
Pitt	20,427	5,521	8,993	5,913	27.03%	44.03%	28.95%
Cumberland	40,405	10,610	18,651	11,144	26.26%	46.16%	27.58%
Wake	100,691	21,474	51,611	27,606	21.33%	51.26%	27.42%
Hoke	4,324	721	2,463	1,140	16.67%	56.96%	26.36%
Durham	40,853	11,511	19,254	10,088	28.18%	47.13%	24.69%
Mecklenburg	123,141	31,522	61,407	30,212	25.60%	49.87%	24.53%